

**PACKET DETECTION, SYNCHRONIZATION, AND FREQUENCY
OFFSET ESTIMATION**

ABSTRACT OF THE DISCLOSURE

Techniques are disclosed for detecting a packet. One technique includes sampling
5 a received signal to produce a sequence of samples wherein the sequence of samples
includes a plurality of subsequences of samples; cross correlating the subsequences of
samples with a known form of the subsequence to produce cross correlations; self
correlating the cross correlations to produce a plurality of self correlations; summing the
self correlations; and processing the sum of the self correlations.

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